

ABSTRACT

An inorganic-organic hybrid film-coated stainless steel foil comprising a stainless steel foil substrate having coated on one surface or both surfaces thereof an inorganic-organic hybrid film, wherein the inorganic-organic hybrid film comprises a skeleton formed of an inorganic three-dimensional network structure mainly comprising a siloxane bond, with at least one crosslinked oxygen of the skeleton being replaced by an organic group and/or a hydrogen atom; and an inorganic-organic hybrid film-coated stainless steel foil comprising a stainless steel foil having coated thereon a plurality of inorganic-organic hybrid films each mainly comprising a siloxane bond, wherein at least a part of Si constituting each inorganic-organic hybrid film is chemically bonded to one or both of an organic group and hydrogen, provided that the uppermost layer out of the plurality of inorganic-organic hybrid films may be an inorganic SiO_2 film, and adjacent films of the plurality of inorganic-organic hybrid films (including the inorganic SiO_2 film) differ in the composition from each other.